

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/012425

A. CLASSIFICATION OF SUBJECT MATTER
Int.Cl⁷ C12N15/09, C12N15/12, C12Q1/68, G01N33/50, G01N33/15

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl⁷ C12N15/00-15/90, C12N1/00-9/99, C12Q1/00-70, G01N33/00-98,
C07K1/00-19/00, A61K31/00-48/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
WPI (STN), BIOSIS (STN), MEDLINE (STN), Genbank/EMBL/DDBJ/GeneSeq

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| A | Hiroshi Okabe et al., "Genome-wide Analysis of Gene Expression in Human Hepatocellular Carcinomas Using cDNA Microarray: Identification of Genes Involved in Viral Carcinogenesis and Tumor Progression.", Cancer Research, Vol.61, (2001), pages 2129 to 2137 | 10 |
| A | Xiang-Ru Xu et al., "Insight into hepatocellular carcinogenesis at transcriptome level by comparing gene expression profiles of hepatocellular carcinoma with those of corresponding noncancerous liver.", Proc.Natl.Acad.Sci.USA, Vol.98, No.26, (2001), pages 15089 to 15094 | 10 |

 Further documents are listed in the continuation of Box C. See patent family annex.

| | |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Special categories of cited documents: | |
| "A" | document defining the general state of the art which is not considered to be of particular relevance |
| "E" | earlier application or patent but published on or after the international filing date |
| "L" | document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) |
| "O" | document referring to an oral disclosure, use, exhibition or other means |
| "P" | document published prior to the international filing date but later than the priority date claimed |
| "T" | later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention |
| "X" | document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone |
| "Y" | document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art |
| "&" | document member of the same patent family |

Date of the actual completion of the international search
07 December, 2004 (07.12.04)Date of mailing of the international search report
25 January, 2005 (25.01.05)Name and mailing address of the ISA/
Japanese Patent Office

Authorized officer

Facsimile No.

Telephone No.

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| A | Norio IIZUKA et al., "Oligonucleotide microarray for prediction of early intrahepatic recurrence of hepato-cellular carcinoma after curative resection.", The Lancet, Vol.361, No. 9361, 15 March, 2003 (15.03.03), pages 923 to 929 | 10 |
| A | Sin Tim Cheung et al., "Identify Metastasis-associated Genes in Hepatocellular Carcinoma through Clonality Delineation for Multinodular Tumor.", Cancer Research, Vol.62, (2002), pages 4711 to 4721 | 10 |

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Box No. I Nucleotide and/or amino acid sequence(s) (Continuation of item I.b of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, the international search was carried out on the basis of:
 - a. type of material
 - a sequence listing
 - table(s) related to the sequence listing
 - b. format of material
 - in written format
 - in computer readable form
 - c. time of filing/furnishing
 - contained in the international application as filed
 - filed together with the international application in computer readable form
 - furnished subsequently to this Authority for the purposes of search
2. In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
3. Additional comments:

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Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.: 1-9

because they relate to subject matter not required to be searched by this Authority, namely:

The inventions according to claim 1 to 9 relate to "a method of evaluating cancer" which is recognized as a method of substantially judging pathological conditions of humans or the like by measuring a gene expression amount in the human body and collecting data for a medicinal (continued to extra sheet)

2. Claims Nos.:

because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. Claims Nos.:

because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

The additional search fees were accompanied by the applicant's protest.
 No protest accompanied the payment of additional search fees.

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Continuation of Box No.II-1 of continuation of first sheet(2)

purpose, i.e., to find out a disease or understand health conditions. Thus, the inventions according to claims 1 to 9 pertain to diagnostic methods.